



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,529	06/02/2006	Shin Kikuchi	062603	9467
38834 7590 04/06/2009 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036				
EXAMINER ZANELLI, MICHAEL J				
ART UNIT 3661		PAPER NUMBER		
MAIL DATE 04/06/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/581,529

**Applicant(s)**

KIKUCHI ET AL.

**Examiner**

Michael J. Zanelli

**Art Unit**

3661

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-11, 13-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/2/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

#### **DETAILED ACTION**

1. This application has been examined. The preliminary amendment filed 6/2/06 has been entered. Claims 1-4, 6-11, 13-16 and 18-19 are currently pending.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS filed 6/2/06 has been considered as indicated. JP-3100052 has not been considered because applicant has not provided a translation or statement of relevancy. This document was not cited in the Search Report of the corresponding International Application.
4. The abstract of the disclosure is objected to because it contains legalese ("means"). Correction is required. See MPEP § 608.01(b).
5. The disclosure is objected to because of the following informalities:
  - A. Reference to specific claims should be deleted since the final numbering of the claims at the time of issue may be different.
  - B. Headings must be provided for each section of the specification as appropriate. Currently there are three headings relating to the Brief Description of the Drawings.
6. Claims 1-7 are objected to because of the following informalities:
  - A. As per claim 1, insert period at the end of the claim.
  - B. All claims depending from an objected base claim are also objected to as containing the same deficiencies.
7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-4, 6-11, 13-16 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As per claim 1, the claim uses the phrase "means that" which is being interpreted as a variation of "means for", thus invoking 35 U.S.C. 112, sixth paragraph (Note: the examiner suggests changing "that" to --for-- to avoid ambiguity). Claim elements "travel acquisition means" and "travel data processing means" are means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. The specification at page 12 merely states that "travel acquisition means 11" acquires the travel data from the computer system in a travel management center 50. Fig. 1 merely shows a block 11 labeled "travel acquisition means". There is no clear disclosure of the corresponding structures which link with the claimed "travel acquisition means". Similarly, the "travel data processing means" is merely shown in Fig. 1 as a block 12 labeled "travel data processing means" and there is no clear disclosure of the corresponding structures which link with the claimed "travel data processing means".

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function **without introducing any new matter** (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

- (a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, **without introducing any new matter** (35 U.S.C. 132(a)); or
- (b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

B. As per claim 1, the claim is unclear insofar as line 2 refers to "a vehicle that travels on a road" whereas lines 8 and 11 refer to "each vehicle" and "each travel route" which implies a plurality of vehicles and travel routes. Furthermore, the claim refers to "each stop"; however, the claim does not establish a travel route having a plurality of stops.

C. As per claim 2, "the first vehicle" and "the last vehicle" lack antecedence.

- D. As per claim 7, the claim refers to sorting into an order of route code; however, neither of claims 1 or 2 include route codes as part of the travel data.
- E. As per claim 8, the claim refers to "operation processing means" but does not recite a function associated therewith. Thus the claimed "means" is being interpreted as not invoking 35 U.S.C. 112, sixth paragraph. As similarly noted above for claim 1, the claim is unclear insofar as line 2 refers to "a vehicle that travels on a road" whereas lines 9, 12 and 13-14 refer to "each vehicle" which implies a plurality of vehicles. Furthermore, the claim refers to "each stop"; however, the claim does not establish a travel route having a plurality of stops. Also "said travel processing means" lacks antecedence.
- F. As per claim 14, the claim refers to sorting into an order of route code; however, neither of claims 8 or 9 include route codes as part of the travel data.
- G. As per claim 15, claim element "distribution means" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. Page 18 of the specification fails to link the "distribution means" to any particular structures and Fig. 7 merely shows a block labeled "distribution means".

Applicant is required to:

- (a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function **without introducing any new matter** (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

- (a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, **without introducing any new matter** (35 U.S.C. 132(a)); or
- (b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

H. As per claim 15, the claim is unclear insofar as line 2 refers to “a vehicle that travels on a road” whereas line 6 refers to “each vehicle” which implies a plurality of vehicles. Furthermore, the claim refers to “each stop” and each travel route”; however, the claim does not establish a plurality of travel routes having a plurality of stops.

I. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10.. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-4, 6-11, 13-16 and 18-19, as best interpreted given the deficiencies noted above, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schmier et al. (2002/0069017).



- A. As per claims 1, 8 and 15, Schmier discloses a device and method for acquiring travel data as well as a distribution device for distributing travel data based thereon. Fig. 1 shows a vehicle (10) which may be one of a plurality of transit vehicles traveling on an assigned route. Each vehicle includes sensors for acquiring travel data over a period of time [0016-0020]. A central processing means (22) receives the travel data from the various transit vehicles to generate transit tables as well as storing the acquired data to generate an historical database [0021-0022]. The database correlates the collected travel data with conditions under which the data was acquired [0023]. The stored information may subsequently be used to distribute travel data in response to a request from a mobile terminal (Fig. 1: 60). As noted above the claims include "means" language which may be interpreted to invoke 112/6<sup>th</sup> paragraph. Although there does not appear to be a clear link to corresponding structures in the specification, Figs. 2 and 7 appear to suggest computing devices may be involved. Schmier discloses that the device and method utilizes processing circuitry (Fig. 1:16, 22). In the alternative, one of ordinary skill in the art would have found it obvious to embody the teachings of Schmier using a programmed processor or hardware equivalents capable of providing the same functionality.
- B. As per claims 2-4, 6, 7, 9-11, 13, 14, 16, 18 and 19, as above whereby the travel data is acquired from a plurality of transit vehicles operating on assigned routes having stops for picking-up/dropping-off passengers [0062]. Travel data is collected as the transit vehicle operates and is provided to a central processing

means for correlating ("sorting") the data and conditions under which it was obtained to generate transit tables. The transit tables necessarily represent the various operating schedules of the transit vehicles for a given transit route. Conditions under which the travel data is obtained may reflect date/time, traffic and/or weather conditions [0023].

12. Claims 1-4, 6-11, 13-16 and 18-19, as best interpreted given the deficiencies noted above, are further rejected under 35 U.S.C. 103(a) as being unpatentable over Ignatin (2005/0131634).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

A. As per claims 1, 8 and 15, Ignatin discloses a device and method for acquiring travel data as well as a distribution device for distributing travel data based thereon. Fig. 3 shows a system which may be used to acquire travel data from a plurality of "clients" (303) (i.e., roadway vehicles) traveling on a road [0035]. A processing system (317) receives the travel data from the various clients to generate an historical database [0026, 0031]. The database correlates the collected travel data with conditions under which the data was acquired (i.e., date, weather, traffic, etc.). The stored information may subsequently be used to distribute travel data in response to a request from a mobile terminal [0027]. As noted above the claims include "means" language which may be interpreted to invoke 112/6<sup>th</sup> paragraph. Although there does not appear to be a clear link to

corresponding structures in the specification, Figs. 2 and 7 appear to suggest computing devices may be involved. Ignatin discloses that the device and method utilizes processing circuitry (Fig. 3:317). In the alternative, one of ordinary skill in the art would have found it obvious to embody the teachings of Ignatin using a programmed processor or hardware equivalents capable of providing the same functionality. Furthermore, although Ignatin does not specifically disclose that the travel routes are correlated with particular vehicles, one of ordinary skill in the art would have recognized that the teachings of Ignatin would have found applications related to a fleet of vehicles operating assigned routes whereby the historical travel data would have been necessarily reflective of the assigned travel routes.

B. As per claims 2-4, 6, 7, 9-11, 13, 14, 16, 18 and 19, as above whereby the travel data is acquired from a plurality of clients (roadway vehicles) operating on travel routes. The collected travel data is correlated with conditions under which it was collected (i.e., weather, traffic, date, etc.). As noted above, the manner in which the data was correlated/sorted and formatted for distribution would have been reflective of the end use application. For example, the travel data would be processed and formatted differently based on whether the collected information was to be used by a fleet operator, transit system or the general public.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969. The examiner can normally be reached on Monday-Thursday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Zanelli/  
Primary Examiner  
Art Unit 3661